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PTOS/8A (08-00)

Approved for use through 10/31/2002. CMB 0851-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete If Known

Application Number	
Filing Date	
First Named Inventor	Brad A. Armstrong
Group Art Unit	
Examiner Name	
Attorney Docket Number	

Sheet 1 of 12

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
		5200597		Eastman	4-1993	generally all
		5207426		Inoue	9-1993	" "
		5287089		Parsons	2-1994	" "
		5311779		Teruo	5-1994	" "
		5315204		Park	5-1994	" "
		5364108		Esnouf	11-1994	" "
		5365494		Lynch	11-1994	" "
		5376913		Pine	12-1994	" "
		5396235		Maeshima	7-1995	" "
		5440237		Brown	8-1995	" "
		5457478		Frank	10-1995	" "
		5640566		Victor	6-1997	" "
		5670955		Thorne	9-1997	" "
		5673237		Blank	9-1997	" "
		5675329		Barker	10-1997	" "
		5689285		Asher	11-1997	" "
		5764219		Rutledge	10-1998	" "
		5778404		Capps	7-1998	" "
		5790102		Nassima	8-1998	" "
		5847305		Yoshikawa	12-1998	" "

Handwritten initials and date: 2/2/05

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	TV
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
			DE3031484		Gurndig	11-1982	generally all	
			DE3543890		Thomson-Brant	6-1987	" "	
			GB2113920		Alps Electric	8-1983	" "	
			GF2038462		Shin-Etsu Polymer	1981-7	" "	
			wo9957630		Schneider	1999-11	" "	
			5-87760 Japan		Mitsumi Electric	1995-11	" "	
			JP7902159		Sega Enterprise	1995-11	" "	
			EP0470615		Nintendo Co.	1992-2	" "	
			0 470 615 A1		Nintendo Co.	1992-2	" "	
			DE4013227		Poulsom	5-1991	" "	

Examiner Signature: [Signature] Date Considered: 2/19/05

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<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language translation is attached.

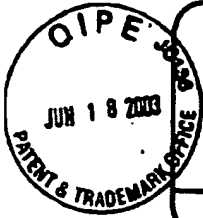
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PTO/SB/08A (04-00)

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Substitute for form 1449A/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	
		Filing Date	
		First Named Inventor	Brad A. Armstrong
		Group Art Unit	
		Examiner Name	
Sheet	2	of	12
		Attorney Docket Number	

U.S. PATENT DOCUMENTS						
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appert
		Number	Kind Code <sup>2</sup> (if known)			
		5565891		Armstrong	15 1996	generally all
		5589828		Armstrong	12 1996	" "
		5999084		Armstrong	12 1999	" "
		6102802		Armstrong	8 2000	" "
		6135886		Armstrong	10 2000	" "
		6198473		Armstrong	3 2001	" "
		6208271		Armstrong	3 2001	" "
		6222525		Armstrong	4 2001	" "
		3611068		Pujita	10 1971	" "
		3806471		Mithell	4 1974	" "
		3952173		Tsuii	4 1976	" "
		3988556		Hyodo	10 1976	" "
		4224602		Anderson	9 1980	" "
		4313113		Thornburg	1 1982	" "
		4315238		Eventoff	2 1982	" "
		4552360		Bromley	11 1985	" "
		4673919		Kataoka	6 1987	" "
		4786895		Castaneda	11 1988	" "
		4866542		Shimada	9 1989	" "
		5164697		Kramer	11 1992	" "

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FOREIGN PATENT DOCUMENTS								
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appert	T <sup>7</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
			wo9532776		Namco	12 1995	generally all	
			ep1080753		Namco	3 2001	" "	
			jp6154422		Namco	6 1994	" "	
			jp9218737		Namco	8 1997	" "	
			ep1080753		Namco	3 2001	" "	
			ep0337458		Namco	10 1989	" "	
			ep0337458		Namco	10 1989	" "	
			jp7281824		Namco	10 1995	" "	
			ep0470615		Nintendo	2 1992	" "	
			ep0579448		Texas Instruments	1-1994	" "	

Examiner Signature	<i>William C. Chen</i>	Date Considered	2/19/05
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Substitute for form 1448A/PTO

**INFORMATION DISCLOSURE STATEMENT BY APPLICANT**  
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Sheet 3 of 12

**Complete If Known**

Application Number	
Filing Date	
First Named Inventor	<b>Brad A. Armstrong</b>
Group Art Unit	
Examiner Name	
Attorney Docket Number	

U.S. PATENT DOCUMENTS						
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Paragraphs or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
DC		5854624		Grant	12 1998	generally all
		5883619		Ho	3 1999	" "
		5889236		Gillespie	3 1999	" "
		5895471		King	2 1999	" "
		5948066		Whalen	4 1999	" "
		5910798		Kim	6 1999	" "
		5943044		Martinelli	8 1999	" "
		5974238		Chase	10 1999	" "
		5995026		Sellers	11 1999	" "
		6020884		MacNaughton	2 2000	" "
		6049812		Bertram	2 2000	" "
		6118979		Powell	2 2000	" "
		6157935		Tran	12 2000	" "
		6185158		Ito	2 2001	" "
		608342740		Parker	12 1993	" "
		5278557		Stokes et al	1 1994	" "

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FOREIGN PATENT DOCUMENTS								
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Paragraphs or Relevant Figures Appear	TI
		Office <sup>2</sup>	Number <sup>2</sup>	Kind Code <sup>2</sup> (if known)				

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<sup>2</sup> Unique citation designation number. <sup>3</sup> See attached kinds of U.S. Patent Documents. <sup>4</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>5</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>7</sup> Applicant is to place a check mark here if English language Translation is attached.

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PTOSBQIA (10-01)

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Substitute for form 1449A/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>		Application Number	
		Filing Date	
		First Named Inventor	Brad A. Armstrong
		Art Unit	
		Examiner Name	
Sheet	9 of 12	Attorney Docket Number	

U.S. PATENT DOCUMENTS						
Examiner Initials <sup>1</sup>	Cite No. <sup>2</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>3</sup> (if known)			
		us-5510812		1996-4	O'Mara	Generally all
		us-4469330		1984-4	Asher	generally all
		us-4246452		1981-7	Chandler	generally all
		us-5565891		1996-10	Armstrong	generally all
		us-D355901		1995-2	Bradley	generally all
		us-4555960		1985-10	King	generally all
		us-4924216		1990-5	Leung	generally all
		us-4933670		1990-4	Wislocki	generally all
		us-5065146		1991-11	Garrett	generally all
		us-5128671		1992-11	Thomas, Jr.	generally all
		us-5237311		1993-8	Wislocki <i>M.A. / L.S.</i>	generally all
		us-5293158		1994-3	Soma	generally all
		us-5298919		1994-3	Chang	generally all
		us-5329276		1994-7	Hirabayashi	generally all
		us-2430284		1947-11	Evers	generally all
		us-3693425		1972-4	Starita et al	generally all
		us-3921445		1975-11	Hill et al	generally all
		us-4099409		1978-11	Edmond	generally all
		us-4216467		1980-12	Colston	generally all
		us-4297542		1981-10	Shumway	" "

OK 2/28

FOREIGN PATENT DOCUMENTS							
Examiner Initials <sup>1</sup>	Cite No. <sup>2</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country	Number <sup>3</sup>	Kind Code <sup>4</sup> (if known)			
		5-87760	(Japan)		1993-11	Mitsumi Elec.	generally all
		7-302159	(Japan)		1995-11	Sega Enter.	generally all
		0 470 615 A1	(JP)		1992-8	Nintendo	generally all
		0205726	(JP)		1986-12	Hal Lab INC	generally all
		739505	(SU)		1977-6	Baranov	generally all
		2205941	(GB)		1988-7	Garrett	generally all
		2240614	(GB)		1991-8	Dzholdasbekov	generally all

Examiner Signature	<i>[Signature]</i>	Date Considered	6/19/05
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<sup>2</sup> Applicant's unique citation designation number (optional). <sup>3</sup> See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 601.04. <sup>4</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>5</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>7</sup> Applicant is to place a check mark here if English language translation is attached.  
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		Filing Date	
		First Named Inventor	<b>Brad A. Armstrong</b>
		Art Unit	
		Examiner Name	
		Attorney Docket Number	
Sheet	<b>10</b>	of	<b>12</b>

U.S. PATENT DOCUMENTS						
Examiner Initials	Cite No. 1	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code 2 (if known)			
		us4348142		1982-9	Pigour	generally all
		us4369663		1983-1	Venturullo et al	generally all
		us4414537		1983-11	Grimes	" "
		us4536746		1985-8	Gobell	" "
		us4555960		1985-12	King	" "
		us4670743		1987-6	Zemke	" "
		us4684089		1987-8	van der Lely	" "
		us4811608		1989-8	Hilton	" "
		us4855704		1989-8	Betz	" "
		us4910503		1990-9	Broadsky	" "
		us4935728		1990-10	Kley	" "
		us5128671		1992-9	Thomas, Jr.	" "
		us5142931		1992-9	Menahem	" "
		us5168221		1992-12	Houston	" "
		us5189333		1993-8	Larkins et al	" "
		us5252952		1993-10	Frank et al	" "
		us5329276		1994-1	Hirabayashi	" "
		US-				
		US-				
		US-				

FOREIGN PATENT DOCUMENTS								
Examiner Initials	Cite No. 1	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>3</sup>
		Country Code 2	Number 3	Kind Code 4 (if known)				
			0205726	(EP)	12	1986		generally all
			739505	(SU)		1977-1-30		generally all
			2205941	(GB)	12	1988		generally all
			2240614	(GB)	8	1991		generally all

Examiner Signature	<i>Dana [Signature]</i>	Date Considered	<i>2/19/05</i>
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(use as many sheets as necessary)		Filing Date	
		First Named Inventor	Brad A. Armstrong
		Group Art Unit	
		Examiner Name	
Sheet	12	of	12
		Attorney Docket Number	

Not all are prior art to the present invention

U.S. PATENT DOCUMENTS						
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		Number	Kind Code‡ (If known)			
DC		5555004		ONO ET AL	1996 9	generally all
		5963196		NISHIUMI ET AL	1999 10	" "
		5059958		JACOBS ET AL	1991 10	" "
		4158759		MASON	1979 6	" "
		4406217		OOTB	1983 9	" "
		6198948		SUDO ET AL	2001 3	" "
		5669818		THORNER ET AL	1997 9	" "
		6422941		THORNER ET AL	2002 7	" "
		5231386		BRANDENBURG ET AL	1993 7	" "
		5889507		ENGLE ET AL	1999 3	" "
		6326948		KOBACHI ET AL	2001 12	" "
		5689285		ASHER	1997 11	" "
		<del>6352447</del>		SOMA ET AL	2002 5	" "
		4680577		STRAAYER	1987 7	" "
		6524187		KOMATA	2003 2	" "

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FOREIGN PATENT DOCUMENTS							
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		Office‡	Number‡	Kind Code‡ (If known)			
DC			EP 0 835 676		SEGA ENTERPRISES	<del>1989</del> 4-98	generally all

Examiner Signature	/Doon Chow/	Date Considered	01/24/2007
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